

Theoretical basis of mobile learning and use of mobile platforms

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Abstract

The article describes mobile education, pedagogical foundations of mobile education, development history, mobile platforms and their analysis.

Keywords: mobile, platform, pedagogic, technology

Introduction

Technological perspective - mobile learning - using WAP or GPRS technology, accessing the Internet, searching and retrieving materials, answering questions on the forum, testing (testing) consists in sending and receiving educational materials on an additional portable mobile device. Mobile learning is a compact, portable, routine activity using mobile devices and technology that enables learners to make learning more effective by acquiring or creating information through communication.

REFERENCES AND METHODOLOGY

Mobile learning is the ability to receive or present information in any format on personal mobile devices [2].

As J. Trakhler notes [4]: “Mobile learning changes the whole learning process. Education becomes adequate and individualized in a timely manner”

D. Kelly [3] Mobile learning is not a process of moving educational materials to a small screen and using mobile devices, but a way of introducing innovative forms of learning: the development of innovative mobile educational materials with educational microblogs, news feeds, course broadcasts, etc. that process.

The use of mobile technology in the educational process provides the following opportunities:

1. Ability to control attendance (Participation monitoring);
2. Inspirational (motivational) nature of the educational process;
3. The same control over the level of knowledge of students;
4. Exchange of information between participants in the educational process acceleration;
5. Personal psychological and physiological characteristics of students flexibility of mobile devices in an individual approach, taking into account their characteristics (Individual approach).

In this case, the effectiveness of learning and memorizing learning resources increases, students develop learning motivation. In this case, if the students are interested in completing the assignments, the volunteer teacher can say without hesitation that the audience will liven up, the motivation for learning will develop, and the learning efficiency will increase.

The student may have a different approach to the process of using mobile technologies when designing lessons in traditional (face-to-face) education. For example, A. Amirov, A. Ashimbekova, A. Temirova [1] divided the use of mobile devices in the learning process into the following groups:

- ❖ Multimedia training - for demonstrating web resources (audio files, videos, graphics, maps and images);
- ❖ Educational sites, resources, reference books, dictionaries provide quick fix;
- ❖ To ensure communication in the learning process (SMS messages, Twitter, Telegram, webinars, etc.).

RESULTS

Yu. Shishkovskaya [5] for educational purposes from mobile devices.

Speaking of several uses, he listed the following:

Firstly, independent learning: This includes the possibility of independent learning due to the ease and simplicity of use of materials based on mobile learning technologies, interactivity and the availability of special applications that allow self-management and self-assessment to be created.

Secondly, M-Learning ideas can be applied equally in the education system as well as in the traditional teaching process in higher education institutions.

Thirdly, mobile learning can be an effective complement to distance learning or corporate training courses.

Mobile platforms Android, Windows Phone, iOS (Table 1):

The Android platform already supports Wi-Fi Direct, NFS and allows you to transfer media files. Also, via the USB port, you can connect smart phones and tablets based on this operating system: cameras, TV tuners, flash memory.

Tools Installed and updated security system prevents the acceptance of uncertified and malware. Android 4.3 (Jelly Bean) version supports Bluetooth smart functions, allowing you to communicate with any Bluetooth devices without a headset, and you can work with Open GLES3.0 APP.

With the release of Windows Phone 8, users will be able to integrate their smart phones, tablets and PCs into one system. (this allows mobile app developers to move apps across devices) The main difference of this platform is that it launches applications in the background, unloading and increasing the amount of RAM on its own.

The iOS mobile platform has a simple and intuitive interface, and the software is fast and efficient. Having a reliable security system prevents suspicious programs from running and thus damages the system. The disadvantages of this platform are that it is NFS and Wi-Fi does not support Direct technology, so music can only be downloaded via iTunes. The added news allows you to listen to music online.

Table 1

Statistics of operating systems for mobile phones	%
Android	70,43
iOS	29,06
Samsung	0,16
KaiOS	0,11

Windows	0,07
Tizen	0,02
Series 40	0,02
Nokia	0,02
BlackBerry OS	0,01
Linux	0,01
Other	0,09

DISCUSSION

Today there are a number of mobile applications that can be successfully used for educational purposes. For teachers, we'll take a closer look at some of the resources that can be helpful when using mobile technology in the classroom.

Today, with the development of mobile technology, smart phones have allowed their users to be good friends at any time, read e-books of their choice, explore the secrets of the field in which they are interested, in short, study. Smart phones are multipurpose devices. Of course, reading e-books will never be their main goal. However, they are very useful as they allow you to read the book anywhere and anytime.

CONCLUSION

Textbooks and manuals in the form of mobile applications provide students with the following benefits:

- First of all, there is no need to carry heavy books with you. All the necessary textbooks, books and manuals are at your disposal at any time;
- mobile books do not disappear, do not tear or not to be old;
- mobile textbooks are very easy to use
- you can customize the settings as you like, that is, view the text in a larger font, enlarge images, install overlays with letters where necessary, continue reading where you came from, etc.;
- mobile textbooks and study guides help in independent study of the topic and consolidation of knowledge.

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